

An Overview of Effective Postgraduate Supervision Style Based on Assessment and Supervisory Model

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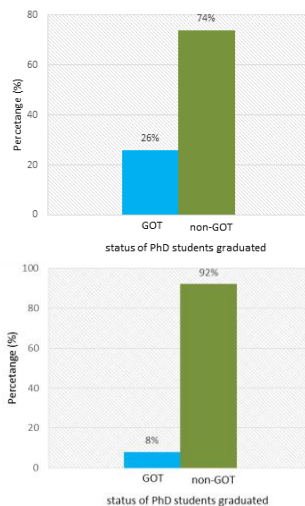
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Graphical abstract



Abstract

Research process involves personal and professional relationship between students and supervisors. Successful research can be achieved if sustainable supervisor-student relationship is attained along the research journey. It is supervisors' role to challenge and extend their students abilities in all areas to ensure their success in research timely. In this case, students' abilities or progress must be assessed and evaluated. Evaluation and assessment is thus very important for any research and educational process. This paper overview the use of different evaluation as well as assessment systems for postgraduate supervision. Different methods of supervision are also briefly overviewed. Group supervision is probably to be most reliable model practiced by several institutions to conduct research students due to increasing numbers or students as well as demanding from academic environment hold by supervisor including administration commitments.

Keywords: Supervision concept; research; postgraduate development

Abstrak

Proses penyelidikan melibatkan hubungan profesional dan peribadi antara pelajar dan penyelia. Penyelidikan yang berjaya boleh dicapai jika hubungan yang serasi penyelia-pelajar diperolehi sepanjang penyelidikan dijalankan. Menjadi tanggungjawab penyelia untuk memupuk dan mengembangkan kebolehan pelajar dalam semua bidang untuk memastikan penyelidikan dijalankan tepat pada masanya. Dalam kes ini, kebolehan dan kemajuan pelajar hendaklah dinilai. Penilaian adalah penting di dalam penyelidikan dan proses pendidikan. Kertas ini meninjau pelbagai sistem penilaian dan pengukuran yang digunakan untuk penyeliaan pascasiswazah. Perbezaan kaedah-kaedah penyeliaan juga ditinjau secara menyeluruh. Didapati model penyeliaan berkumpulan mungkin lebih bersesuaian yang telah diamalkan oleh beberapa institusi untuk memantau penyelidikan pelajar disebabkan oleh jumlah pelajar yang semakin meningkat serta desakan persekitaran akademik yang diuruskan oleh penyelia termasuk komitmen pentadbiran.

Kata kunci: Model penyeliaan; penyelidikan; pembangunan pasca siswazah

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1.0 INTRODUCTION

Postgraduate research supervision involves a lengthy personal and professional relationship between students and supervisors. Successful research can be achieved if sustainable supervisor-student relationship is attained along the research journey.

Conventionally, when one envisages the research supervision process, it is conceived primarily in terms of a one-to-one relationship with a supervisor. In this case, many students do expect that their supervisor must give full guidance throughout their research journey. They are overlooking the fact that some supervisors are lacking in term of research experience and

supervision as well as limited time for full consultation and guidance due to today's busy academic environment, with supervisors having many diverse demands from their practice.

An effective supervisor should supervise students according to their ability and individual requirements. Hussain¹ categorized postgraduate research supervision in three styles. The first is a highly directive approach, which is very structured with the student being given a lot of advice in the early stages. When the student gains confidence and ability, this level of control is diminished. The second approach is highly directive at the beginning and at the end of the project, with a highly non-directive period in between. The third approach is described as

highly directive with close monitoring of the student throughout the whole project. He added the reason why there are three approaches is that students are not homogenous in terms of academic ability, personality attributes, motivation or attitude.

Previously what had been regarded by academics as a private space has moved to welcome the potential of collaboration. As reported in², it has shifted to ‘being more visible, more open for discussion, reflection and negotiation’. Cullen *et al.*³ argue that supervision should be conceptualised to encompass a broad view of postgraduate education that includes more than the one-to-one interaction of student and supervisor. They believe that there is a need to go beyond individual supervisory interaction and restructure practice to ensure that responsibility for quality is shared and co-ordinated.

This paper overviews few supervision assessment and evaluation methods from various supervisory models that were reported by other researchers.

2.0 ASSESSMENT AND SUPERVISORY MODEL

Tim Manhard *et al.* [4] developed an assessment model for interpersonal relationship between supervisor and doctoral student called as “questionnaire on supervisor-doctoral student interaction (QSDI)”. This model found to be a reliable instrument for evaluating supervisor’s interpersonal style towards a particular student. However, a rigorous analysis using cronbach’s α is required to correlate and map up the relationship between a doctoral student and supervisor from the perspective of the student. Affero & Norhasni⁵ investigated that supervisory contributions to graduate study were categorized into five which are managerial, research, academic, language and interpersonal input. The study found that managerial input was at the highest priority that they aspects from the supervisors are the process of planning, organizing, directing, monitoring and time management. On the other hand, concept of mentoring for mentee development approached by Norhasni & Aminuddin⁶ were presented in five models. They had discussed the different theoretically and empirically derived models that are (1) The Counseling Model for Effective Helping, (2) The Competence-Based Model and the Mentor as Trainer, (3) The Furlong and Maynard Model of Mentoring, (4) The Reflective Practitioner Model and (5) The True and Pseudo Mentoring Relationship. However, the model was not suitable for research supervision as it was applied for coaching and mentee development.

In The National University of Malaysia (UKM), postgraduate research progress is assessed through an online system that must be completed by supervisors at the end of every semester. They must assess their students’ research progress by recommending to the faculty’s board of postgraduate committee, on their student qualification whether to qualify to continue, warning status or terminated.

The number of Graduate-On-Time (GOT) for doctoral students is also a main indicator to ensure that the supervisory model or assessment tool practiced by the university is effective or lack of enforcement. In addition, many factors are also takes into account to increase the number of GOT such as style of supervision, management system, student’s abilities, and infrastructure as well as financial. GOT can be defined as students who completed their PhD with successful viva voce to a maximum number of 7 semesters. Non-GOT those who completed their PhD for 8 semesters and above. For example the number of GOT for PhD students graduated in Faculty of Engineering and Built Environment, UKM on 2014 was decreased from 2013 as shown in Figure 1. The figures shows that the

number of PhD students graduated on 2013 who attained GOT and non-GOT were 26% and 74%, respectively. It was tremendously decreased in 2014 where GOT was only obtained 8% and non-GOT 92%. The analysis of causes and factors need to be further investigated either due to diminishing ratio of supervisors to students or inadequate supervision method practiced by the faculty.

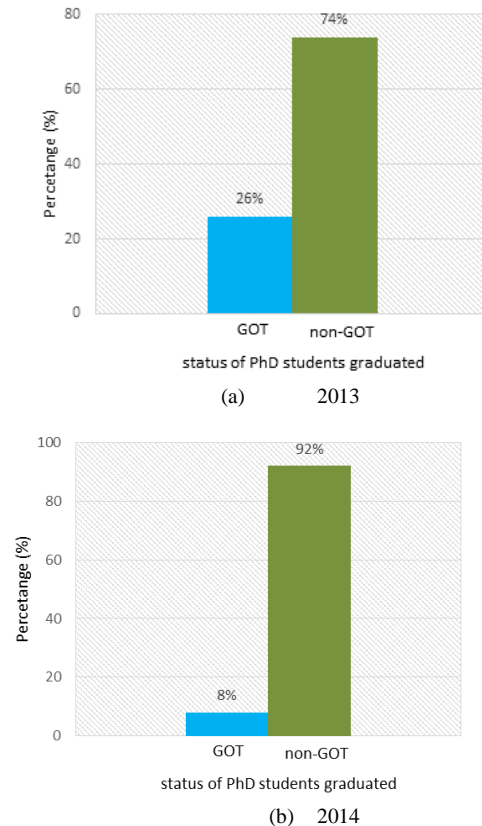


Figure 1 The percentage of GOT and non-GOT PhD students graduated on (a) 2013 and (b) 2014 in Faculty of Engineering and Built Environment, UKM

Nur Rifhan *et al.*⁷ reported that knowledge sharing activities was one of the factors to success in research timely. This study⁷ found that this factor may influence the candidate in conducting their research appropriately and developing good rapport with their supervisor. The study⁷ also concluded that individual factors, quality of supervision and organizational supports have a positive correlation with the expected period of graduation on time.

2.1 Single Supervisory Model

According to Dietz *et al.*⁸, supervision may not follow a single style throughout the supervision process but may vacillate from a business-like approach to a personal approach or from a product oriented approach to a process-oriented approach and *vice versa*. Figure 2 shows the supervision style also proposed by Dietz *et al.*⁸ during various stages of research process throughout the academic journey.

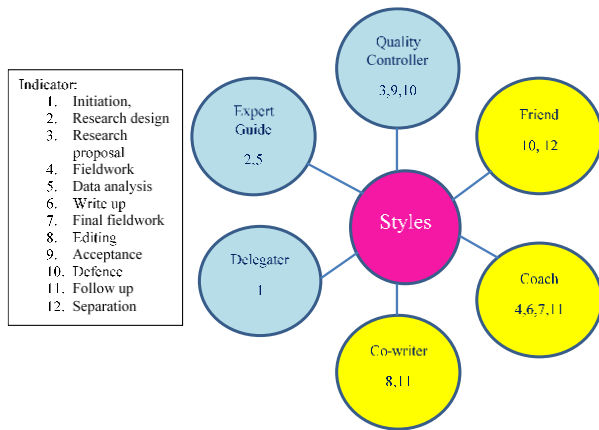


Figure 2 Supervision style during various stages of research process
Source: Dietz et al. [8]

Blending the use of technology with face-to-face postgraduate supervision has been developing apace in recent years. Rodger & Brown⁹ used sophisticated ICTs to support informal social networking among doctoral students of distance education programs. This is interesting in the context of this present research. Other fields have benefited from supervision being supported with the use of technologies; for example Wright & Griffiths¹⁰ explored the experience of using both real time and network communication tools to supervise on a counselling programme at a distance.

Different approaches by Kevin Grant *et al.*¹¹, they were identified three metaphors for postgraduate research supervision that are related to a machine, coach and journey as critical perspective. These three mechanisms navigate them to propose a model to aid reflective supervision practise. The study found that not only a model can be used to success in research but most important ingredient building an effective professional relationship with the student.

For long distance research supervision, isolation can often be a big problem for postgraduates, whether based in the same institution as the supervisor or otherwise. This is particularly true for international students or those who are studying at a distance. The key issues facing such remote students can be summarised as social isolation, difficulties in accessing the research culture, lack of access to resources, lack of face-to-face interaction with supervisors, and difficulties in maintaining a balance between work, study and family. In this case, supervisors and students could be asked to rate the supervisor on a Likert Scale for assessment purposes. The list of indicators proposed by Zuber-Skerrit & Roche¹² is shown in Table 1. This model of assessment was not comprehensive as it leaves with unanswered questions about how qualities and emotional intelligence can be developed for research process.

2.2 Group Supervisory Model

Group supervision with students has been undertaken previously and successfully by some institutions. Pearson¹³ discussed group supervision as a strategy for reducing isolation, supporting students, encouraging the exchange of ideas, and mentoring students in relation to publishing and job-seeking. Qualitative researches by Samara¹⁴ and Dysthe *et al.*¹⁵ reveal that supervisor development skills can also be enhanced by this approach. Additionally, this method also has been found to produce positive impact on the student writing process and their enculturation into the discipline, timely.

Table 1 Indicators of effective and ineffective postgraduate supervisors
Source: Zuber-Skerrit and Roche [12]

Effective	Ineffective
Larger experience base	Small experience base
Encouraging	No encouragement given
Facilitator of learning	Uncertain of role
Resourceful	Not resourceful
Committed to student	No interest in student
Multidisciplinary	Expert in narrow field
Directed by student's needs	Driven by self-needs
Highly organised	Lacks supervision experience
Positive self-image	Lacks research experience
Good writer	Not good at writing
Insightful	Neophyte
Intelligent	Ill-equipped
Knows what	Does not know what he/she wants
Supportive	Judgemental

Group supervision work at the University of Ottawa has proven successful in the context of counsellor professional practice¹⁶. Kandlbinder¹⁷ examined a group of supervisors at the University of Sydney who undertook training in a variety of methods to improve their supervisory practices. These methods included training supervisors to use Internet resources, involving them in group workshops and holding peer discussion groups and reviews on supervisory practices. This change in supervisory practices was developed in response to the concerns of students that the quality of supervision was inadequate. Through the use of group supervision, where students can utilize group feedback to develop independence and increased ability to self-assess through virtual peer learning, these supervision issues can be tackled. As for the supervisor's perspective, group supervision can be useful for exploring the 'teaching' aspects of supervision i.e. conceptual and theoretical issues, research methods, academic writing formats, genre demands, and quality criteria.

In this case, group supervision may include several models namely, workshops, courses, group methodology, team directed, and conference which involves a single supervisor and advisory system at any different stages in the life cycle of thesis. Meanwhile, the so called Joint Panel Supervision may also be adapted that involves some academia, sponsors or industry in supervising a PhD candidate. Nevertheless, group supervision is more often used because it can give better results in terms of student satisfaction and quality of supervision.

3.0 CONCLUSION

At the most basic and extremely important, assessment provides information to help the supervisor and student to enrich their relationship for a successful completion research. As presented in this paper, numerous concept of assessment methods as well as supervision shows that the main responsibility of a supervisor is to guide and advice a student's research. This guidance and advice relates to the direction, completeness, clarity, methodology, topic selection and data collection and also involves giving feedback on the progress of written work. These elements are important to attain an effective supervision if both supervisors and students are adequate to perform their responsibilities, respectively. Group supervision may be the better method to supervise research students as practiced by several institutions due to increasing numbers of students as well as demanding from academic environment hold by supervisor including administration

commitments. Furthermore, peer learning and support in group supervision are some of the approaches which may be appropriate for an effective supervision likewise whereas student's abilities also contribute to this success.

Acknowledgement

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